

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Application No. 09/602,412  
Attorney Docket No. A8492

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (currently amended): A method for managing data stored in a data storage device connected to a computer, comprising ~~the steps of~~:

*A4*  
determining that a web page is to be cached, wherein the web page references other objects;

storing the referenced objects in one or more data stores;

caching the web page in a cache; and

automatically managing the cached web page and the referenced objects ~~in a coordinated fashion~~ to ensure the display of a complete web page.

2. (original): The method of claim 1, further comprising, when one or more of the referenced objects is deleted, deleting the web page from the cache.

3. (original): The method of claim 1, further comprising, when the web page is deleted from the cache, deleting the referenced objects.

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4. (original): The method of claim 1, further comprising, prior to determining that a web page is to be cached:

receiving a request to generate a dynamic web page; and

retrieving data and placing the data in a dynamically generated web page, wherein the data is linked to other stored objects.

*A4*  
5. (original): The method of claim 4, wherein managing the cached web page and referenced objects comprises the steps of:

receiving a request from an administrator to delete the retrieved data based on administrator-provided input; and

deleting the retrieved data based on the administrator-provided input.

6. (original): The method of claim 4, wherein managing the cached data comprises the steps of:

receiving a request from an administrator to delete the linked objects based on an administrator-provided input; and

deleting the linked objects based on the administrator-provided input.

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7. (original): The method of claim 1, further comprising, processing a caching directive that specifies whether the web page should be cached.

8. (original): The method of claim 1, further comprising, associating an expiration timestamp with the web page, wherein the expiration timestamp defines a time period in which the cached web page is valid.

9. (original): The method of claim 8, wherein managing the cached web page and referenced objects further comprises automatically deleting the web page and the referenced objects when the expiration timestamp precedes a current timestamp.

10. (original): The method of claim 9, wherein deleting further comprises first, deleting the web page and second, deleting the referenced objects.

11. (original): The method of claim 8, wherein managing the cached web page and referenced objects comprises the steps of:

receiving a request from an administrator to delete all cached web pages according to some administrator-specified selection criteria; and

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deleting all cached web pages and referenced objects that satisfy the administrator-specified selection criteria.

12. (original): The method of claim 11, wherein deleting further comprises first, deleting the web page and second, deleting the referenced objects.

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13. (currently amended): An apparatus for processing a request that requires the dynamic generation of a web page, the method-apparatus comprising:

a computer; and

one or more programs, performed by the computer, for determining that a web page is to be cached, wherein the web page references other objects, storing the referenced objects in one or more data stores, caching the web page in a cache, and automatically managing the cached web page and the referenced objects in a coordinated fashion to ensure the display of a complete web page.

14. (original): The apparatus of claim 13, further comprising, when one or more of the referenced objects is deleted, deleting the web page from the cache.

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15. (original): The apparatus of claim 13, further comprising, when the web page is deleted from the cache, deleting the referenced objects.

16. (original): The apparatus of claim 13, further comprising, prior to determining that a web page is to be cached, one or more computer programs, performed by the computer, for receiving a request to generate a dynamic web page, and retrieving data and placing the data in a dynamically generated web page, wherein the data is linked to other stored objects.

17. (original): The apparatus of claim 16, wherein managing the cached data comprises one or more computer programs, performed by the computer, for receiving a request from an administrator to delete the retrieved data based on an administrator-provided input, and deleting the retrieved data based on the administrator-provided input.

18. (original): The apparatus of claim 16, wherein managing the cached data comprises one or more computer programs, performed by the computer, for receiving a request from an administrator to delete the linked objects based on a second user provided input, and deleting the linked objects based on the administrator-provided input.

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19. (original): The apparatus of claim 13, further comprising one or more computer programs, performed by the computer, for processing a caching directive that specifies whether the web page should be cached.

20. (original): The apparatus of claim 13, further comprising one or more computer programs, performed by the computer, for associating an expiration timestamp with the web page, wherein the expiration timestamp defines a time period in which the cached web page is valid.

21. (original): The apparatus of claim 20, wherein managing the cached web page and referenced objects further comprises one or more computer programs, performed by the computer, for automatically deleting the web page and the referenced objects when the expiration timestamp precedes a current timestamp.

22. (original): The apparatus of claim 21, wherein deleting further comprises one or more computer programs, performed by the computer, for first, deleting the web page and second, deleting the referenced objects.

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23. (currently amended): The apparatus of claim 20, wherein managing the web page and referenced objects comprises one or more computer programs, performed by the computer, for receiving a request from an administrator to delete all cached web pages according to some administrator-specified selection criteria, and deleting all cached web pages and referenced objects that satisfy the administrator-specified selection criteria.

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24. (original): The apparatus of claim 23, wherein deleting further comprises one or more computer programs, performed by the computer, for first, deleting the web page and second, deleting the referenced objects.

25. (currently amended): An article of manufacture comprising a computer program carrier readable by a computer and embodying one or more instructions executable by the computer to perform method steps for managing data stored in a data storage device connected to a computer, comprising ~~the steps of~~:

determining that a web page is to be cached, wherein the web page references other objects;

storing the referenced objects in one or more data stores;

caching the web page in a cache; and

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automatically managing the cached web page and the referenced objects ~~in a coordinated fashion~~ to ensure the display of a complete Web page.

26. (original): The article of manufacture of claim 25, further comprising, when one or more of the referenced objects is deleted, deleting the web page from the cache.

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27. (original): The article of manufacture of claim 25, further comprising, when the web page is deleted, deleting the referenced objects.

28. (original): The article of manufacture of claim 25, further comprising, prior to determining that a web page is to be cached:

receiving a request to generate a dynamic web page; and  
retrieving data and placing the data in a dynamically generated web page, wherein the data is linked to other stored objects.

29. (original): The article of manufacture of claim 28, wherein managing the cached web page and referenced objects comprises the steps of:

receiving a request from an administrator to delete the retrieved data based on an administrator-provided input; and

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deleting the retrieved data based on the administrator-provided input.

30. (original): The article of manufacture of claim 28, wherein managing the web page and referenced objects comprises the steps of:

receiving a request from an administrator to delete the linked objects based on an administrator-provided input; and

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deleting the linked objects based on the administrator-provided input.

31. (original): The article of manufacture of claim 25, further comprising processing a caching directive that specifies whether the web page should be cached.

32. (original): The article of manufacture of claim 25, further comprising associating an expiration timestamp with the web page, wherein the expiration timestamp defines a time period in which the cached web page is valid.

33. (original): The article of manufacture of claim 32, wherein managing the cached web page and referenced objects further comprises automatically deleting the web page and the referenced objects when the expiration timestamp precedes a current timestamp.

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34. (original): The article of manufacture of claim 33, wherein deleting further comprises first, deleting the web page and second, deleting the referenced objects.

35. (original): The article of manufacture of claim 32, wherein managing the cached web page and referenced objects comprises the steps of:

44 receiving a request from an administrator to delete all cached web pages according to some administrator-specified selection criteria; and  
deleting all cached web pages and referenced objects that satisfy the administrator-specified selection criteria.

36. (original): The article of manufacture of claim 35, wherein deleting further comprises first, deleting the web page and second, deleting the referenced objects.

37. (new): The method of claim 1, wherein at least one of the referenced objects is not stored in said cache.

38. (new): The apparatus of claim 13, wherein at least one of the referenced objects is not stored in said cache.

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39. (new): The article of manufacture of claim 25, wherein at least one of the referenced objects is not stored in said cache.

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